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**A Chrysanthemum Plant Named 'Cream Elite Reagan'**

**RELATED CULTIVARS**

'Cream Elite Reagan' is related to 'White Elite Reagan' and the copending application of 'Sunny Elite Reagan' (pending Serial No. 09/902,749). 'Cream Elite Reagan' and 'Sunny Elite Reagan' are both natural mutants of 'White Elite Reagan',

**BACKGROUND OF THE INVENTION**

'Cream Elite Reagan' is a product of a breeding and selection program that had the objective of finding color mutants of 'White Elite Reagan'. The new plant of the present invention comprises a new and distinct cultivar of chrysanthemum plant that is a natural occurring sport of a parent chrysanthemum named 'White Elite Reagan'. A comparison with parent chrysanthemum 'White Elite Reagan' is also made in this application. The new cultivar was discovered as a whole plant mutation in March, 1999 by Rob Noodelijk in a controlled environment (greenhouse) in Rijsenhout, Holland. The first act of asexual reproduction of 'Cream Elite Reagan' was accomplished when vegetative cuttings were taken from the initial selection in May, 1999 in Rijsenhout, Holland. The new cultivar has been found to retain its distinctive characteristics through successive propagations by cuttings.

**SUMMARY OF THE INVENTION**

The present invention is a new and distinct variety of chrysanthemum bearing medium sized blooms with pale yellow ray-florets and yellow-green disc florets.

**BRIEF DESCRIPTION OF THE DRAWINGS**

The present invention of a new and distinct variety of chrysanthemum is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

Fig. 1 shows a plant of the cultivar in full bloom.

Fig. 2 shows the various stages of bloom of the new cultivar.

Fig. 3 shows the foliage of the new cultivar.

**DESCRIPTION OF THE INVENTION**

This new variety of chrysanthemum is of the botanical classification *Chrysanthemum morifolium*. The observations and measurements were gathered from plants grown in April / May in a greenhouse in Rijsenhout, Holland in a photo-periodic controlled crop under conditions generally used in commercial practice. The greenhouse temperatures during this crop were at day-time between 18°C and 25°C and at night 20°C. After a long day period of 14 days, the photo-periodic response time in this crop was 48 days. After the long day period to flowering, growth retardants were applied 2 to 3 times in an average dose of 2.5 gram / liter water. No tests were done on disease or insect resistance or susceptibility. This new variety produces medium sized blooms with pale yellow ray-florets and yellow-green disc-florets blooming on the plant for 5 weeks. This new variety of chrysanthemum has been found to retain its distinctive characteristics throughout successive

propagations; however, the phenotype may vary significantly with variations in environment such as light intensity and temperature. To show the phenotype as described 'Cream Elite Reagan' can be planted without assimilation lightning (high pressure sodium lamps) between week 50 and week 40 of the next year under greenhouse conditions in Holland. With assimilation light (minimum level 2500 lux) it can be planted year round under greenhouse conditions in Holland.

From the cultivars known to inventor the most similar existing cultivar in comparison to 'Cream Elite Reagan' is 'White Elite Reagan' and 'Cream Reagan' (U.S. Plant Pat. 10,209). When 'White Elite Reagan' and 'Cream Elite Reagan' are being compared the following differences and similarities are noticed: The difference of 'White Elite Reagan' and 'Cream Elite Reagan' is the flower color for which characteristic 'Cream Elite Reagan' has been selected out of 'White Elite Reagan'. All other characteristics of 'White Elite Reagan' and 'Cream Elite Reagan' are similar. (The cultivar of this invention also distinguishes over the existing cultivar 'Yellow Cassa' (U.S. Plant Pat. 6,301) at least by the flower size and disc coloration).

The differences of 'Cream Elite Reagan' and 'Cream Reagan' are: (1) Disc flower color and size. The flower disc of 'Cream Elite Reagan' is more green and smaller. (2) Growth rate. The growth of 'Cream Elite Reagan' is more vigorous. (3) Response time. The response time of 'Cream Elite Reagan' is 4 to 5 days shorter.

The following is a description of the plant and characteristics that distinguish 'Cream Elite Reagan' as a new and distinct variety.

The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society Colour Chart, 1995 edition.

Table 1:Botanical Description of

**CULTIVAR 'Cream Elite Reagan'**

**Bud**

Size	Medium, cross-section 1.0 cm height 0.8 cm
Outside Color	Yellow 8 B
Involutal bracts	2 rows, length 7 mm, width 3 mm
Involutal bracts among disc-florets	Not present
Involutal bracts color	Green 138 B

**Bloom**

Type	Single
Height	Low
Size	Medium to large
Fully Expanded	7.5 – 8.0 cm
Number of blooms per single stem	Average of 10 – 12
Seeds	Not produced
Performance ( blooming period)	26 – 28 days
Fragrance	Typical chrysanthemum

**Color**

Center of the flower (disc-florets)	Immature yellow-green 144 B
	Mature yellow-green 144 A
Color of upper surface of the majority of the ray-florets	Yellow 5 D
Color of the lower surface of the majority of the ray-florets	Yellow 2C

Tonality from Distance	A spray mum with pale yellow flowers and a yellow-green disc
Discoloration to color	Yellow 4 D

#### Ray florets

Texture	Upper and under side smooth
Number	22 – 24
Cross-section	Flat, sometimes convex
Longitudinal axis of majority	Straight, sometimes reflexing
Length of corolla tube	Very short to short
Ray-floret length	3.5 cm
Ray-floret width	1.2 cm
Ratio length / width	Low to medium
Shape of tip	Round sometimes dentate

#### Disc florets

Disc diameter	Medium, 1.0 – 1.2 cm
Distribution of disc florets	Numerous, clearly visible at all stages of flowering
Shape	Tubular
Receptacle shape	Conical raised

#### Reproductive Organs

Stamen (present in disc florets only)	Yellow-green, thin 3 mm in length
Stamen color	Yellow-green 150 B
Pollen	Appears at a very late stage of flowering,
Pollen color	Close to Yellow 12 A

Styles (present in both ray and disc florets)	Thin
Style color	Green 143 B
Style Length	4 mm
Stigmas	Yellow-green 144 A
Stigma Width	1 mm

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 Ovaries

Enclosed in calyx

Plant

Form	A spray mum meant for erect culture
Growth habit	Upright
Growth rate	Vigorous
Height	100 – 125 cm
internodes	3.0 cm
Spray formation	Corymbiform (funnel-shaped with a little round to flat umbel on top)
Peduncle length	Near the top 14 cm, near the middle 23 cm, near the bottom 30 cm
Peduncle color	Green 138 B
Peduncle, attachment	Good, not brittle
Peduncle, angle with stem	Small, 30 °
Stem Color	Green 138 B
Stem Strength	Medium
Stem Brittleness	Absent
Stem Anthocyanin Coloration	Absent
Flowering Response(photo-periodic controlled crop, not natural season)	48 days

Foliage

Color	upper side 137 A under side 147 B
Size	Medium; length 12 cm, width 8.5 – 9.0 cm.
Quantity (number per single stem)	22 – 28
Shape	Ovate to oval
Texture upper side	Glabrous
Texture under side	Slightly pubescent
Venation arrangement	Pinnate
Shape of the margin	Lobed
Shape of Base of Sinus Between Lateral Lobes	Round
Margin of Sinus Between Lateral Lobes	Parallel to diverging
Shape of Base	Truncate
Apex	Mucronate

Table 2: Differences with the comparison Varieties

	'Cream Elite Reagan'	'White Elite Reagan'	'Cream Reagan'
Color of the ray-florets	Yellow 5 D	White 155 D	Yellow 5 A
Flower disc size	1.0 – 1.2 cm	1.0 – 1.2 cm	1.5- 2.0 cm
Flower disc color immature	Yellow-green 144 B	Yellow-green 144 A	Yellow-green 151 C
Growth rate	Vigorous	Vigorous	Medium
Peduncle, angle with the stem	30°	30°	30° – 35°
Response time in days	48	49	53 – 54